

AMENDMENT UNDER 37 C.F.R. § 1.111
US APPLN. NO. 09/628,168
ATTORNEY DOCKET NO. Q60267

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) A device for enhancing contrast for a liquid crystal display (LCD) projection system, the contrast enhancing device comprising:
an image driver supplying an image signal;
an LCD panel for converting the ~~input~~ image signal into an optical image signal; and
a contrast control portion positioned on the same optical axis as that of the LCD panel,
for controlling the contrast an amount of scanned light according to an average level of the image
signal~~the brightness of a corresponding image.~~

b
cont
2. (*Currently Amended*) The contrast enhancing device of claim 1, wherein said image driver comprises ~~includes~~ an auto brightness limiter (ABL) function for ~~automatically controlling~~
~~an average brightness of the image signal supplied on said LCD panel.~~

3. (*Currently Amended*) The contrast enhancing device of claim 2, wherein said contrast control portion comprises:

a contrast control plate for controlling an amount of light scanned from said LCD panel;
and
a contrast controller for generating a contrast control signal for controlling the degree of
the opening and closing of said contrast control plate according to an ~~the~~ ABL control signal.

AMENDMENT UNDER 37 C.F.R. § 1.111
US APPLN. NO. 09/628,168
ATTORNEY DOCKET NO. Q60267

4. (*Currently Amended*) The contrast enhancing device of claim 3, wherein said contrast controller applies the contrast control signal which is inversely proportional to the ABL control signal supplied from ~~form~~-said image driver.

5. (*Original*) The contrast enhancing device of claim 3, wherein said contrast control plate is an LCD.

6. (*Currently Amended*) The contrast enhancing device of claim 5, wherein said contrast control plate controls the degree of the opening and closing of cells comprising ~~eonstituting~~ the LCD according to the contrast control signal applied from said contrast controller.

7. (*Currently Amended*) The contrast enhancing device of claim 3, wherein said contrast controller applies the contrast control signal for controlling said contrast control plate to be closed in correspondence to a difference value if the average level of the image signal is lower than a ~~the~~ reference level, or controlling said contrast control plate to be opened in correspondence to a difference value if the average level of the image signal is higher than the reference level.

8. (*Original*) The contrast enhancing device of claim 1, further comprising a polarizing plate for selectively transmitting the light scanned from said LCD panel according to the polarization component of the light, wherein said contrast control portion is disposed on an optical path between said LCD panel and said polarizing plate.

AMENDMENT UNDER 37 C.F.R. § 1.111
US APPLN. NO. 09/628,168
ATTORNEY DOCKET NO. Q60267

9. (*New*) The projection system of claim 3, wherein said contrast control plate is opened if an average level of the image signal is higher than a reference level.

10. (*New*) A liquid crystal display projection system, the projection system comprising:
an image driver supplying an image signal and a brightness control signal;
a liquid crystal display panel for converting the image signal into an optical image signal;
and

a contrast controller that controls the contrast of the optical image signal according to the brightness of the image signal, wherein the contrast controller applies a contrast control signal that is inversely proportional to the brightness control signal.
b1

11. (*New*) The projection system of claim 10, wherein said contrast controller comprises:
a control plate for controlling the contrast of the optical image signal output from said liquid crystal display panel; and
a controller for generating the contrast control signal for controlling said control plate according to the brightness control signal.

12. (*New*) The projection system of claim 11, wherein said control plate is a liquid crystal device.

AMENDMENT UNDER 37 C.F.R. § 1.111
US APPLN. NO. 09/628,168
ATTORNEY DOCKET NO. Q60267

13. (*New*) The projection system of claim 12, wherein said contrast control signal controls the opening and closing of cells comprising the control plate.

14. (*New*) The projection system of claim 13, wherein said control plate is closed if an average level of the image signal is lower than a reference level.

15. (*New*) The projection system of claim 13, wherein said control plate is opened if an average level of the image signal is higher than a reference level.

b
16. (*New*) The projection system of claim 10, further comprising a polarizing plate for selectively transmitting light output from said liquid crystal device panel according to a polarization component of the light, wherein said contrast controller is disposed on an optical path between said liquid crystal device panel and said polarizing plate.

17. (*New*) A liquid crystal display projection system, the projection system comprising:
an image driver supplying an image signal;
a liquid crystal display panel for converting the image signal into an optical image signal;
and
a contrast control portion that controls the contrast of the optical image signal according to an average level of the image signal.

AMENDMENT UNDER 37 C.F.R. § 1.111
US APPLN. NO. 09/628,168
ATTORNEY DOCKET NO. Q60267

18. (*New*) The projection system of claim 17, wherein said image driver comprises an auto brightness limiter function.

19. (*New*) The projection system of claim 18, wherein said contrast control portion comprises:

a contrast control plate for controlling the contrast of the optical image signal output from said liquid crystal display panel; and

a contrast controller for generating a contrast control signal to control said contrast control plate according to a control signal output by the auto brightness limiter function.

B1
cont.
20. (*New*) The projection system of claim 19, wherein said contrast control signal is inversely proportional to the control signal output by the auto brightness limiter function.

21. (*New*) The projection system of claim 19, wherein said contrast control signal controls the opening and closing of cells comprising the contrast control plate.

22. (*Currently Amended*) The projection system of claim 17, further comprising a polarizing plate for selectively transmitting light output from said liquid crystal device panel according to a polarization component of the light, wherein said contrast control portion is disposed on an optical path between said liquid crystal device panel and said polarizing plate.